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EXAMINER	
BARTON, JEFFREY THOMAS	
ART UNIT	PAPER NUMBER
1795	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/056,050	CABILLY ET AL.	
	Examiner	Art Unit	
	Jeffrey T. Barton	1795	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 October 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *See Continuation Sheet* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *77* is/are allowed.

6)☒ Claim(s) *1-9,12-14,19-21,50,53-56,58-60,62-65,67-69,71,75,79-82,85-91,93-101,103 and 104* is/are rejected.

7)☒ Claim(s) *18 and 73* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Continuation of Disposition of Claims: Claims pending in the application are 1-9,12-14,18-21,50,53-56,58-60,62-65,67-69,71,73,75,77,79-82,85-91,93-101,103 and 104.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 30 October 2007 has been entered.

Response to Amendment

2. The amendment filed on 30 October 2007 does not place the Application in condition for allowance.

Status of Rejections Pending Since the Office Action of 27 July 2007

3. All rejections of claim 102 are obviated by cancellation of the claim.

4. All other rejections are maintained.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 85 and 86 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention. These claims require the cathode and anode, respectively, to be in the third region, although claim 1 requires these electrodes to be positioned in either the first or second region. Claim 85 is treated as though it requires the cathode to be within the first region, and Claim 86 is treated as though it requires the anode to be within the first region. Appropriate correction is required.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 1-4, 62, 71, 85-87, 91, and 94-101 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tocci in view of Elson et al.

Regarding claim 1, Tocci discloses a disposable electrophoresis cassette (Figures 1-6) comprising an enclosed chamber having top (5), bottom (4), side (2) and end (3) walls as claimed; wherein the bottom wall is contiguous and the chamber comprises three regions as claimed (e.g. narrow central section as the first region with reservoir regions on either side); wherein the chamber comprises an electrophoresis area (e.g. central section); a gel matrix within the chamber comprising an electrolyte (Column 3, lines 8-18); and an anode and cathode disposed in respective sealed regions 6 and 7. (Foil electrodes 8, in contact via semi-solid buffer; Column 2, lines 9-30)

Regarding claim 2, Tocci discloses all regions being sealed before and during electrophoresis. (e.g. Figures 4 and 5 - electrode 8 folds out, then is held in position for electrophoresis by the lid after sealing; also support medium 12 disposed on lid provides buffer at the time of use; Column 3, lines 8-24; Column 4, line 55 - Column 5, line 4)

Regarding claims 3, 4, and 62, Tocci discloses metal foil electrodes. (Column 6, lines 10-11) Any metal can be electrochemically ionized under certain conditions,

including electrophoresis, given a high enough voltage and choice of/lack of solvent, etc.

Regarding claim 71, Tocci discloses a method of using his cassette comprising loading samples and applying an electrical field. (Column 3, lines 54-67)

Regarding claims 85 and 86, either reservoir of Tocci (6 or 7) corresponds to the instant first or second region, and either could clearly contain the anode or cathode.

Regarding claims 87 and 91, the electrodes 8 are embedded in the reservoir gel, which transmits the electric field, therefore reading on the claimed "electrophoresis gel matrix". (Figures 3-5)

Regarding claims 94-100, the top wall of Tocci is sealed to the side walls and end walls during operation, thus sealing the first and second regions (Figures 3-5; Column 4, lines 55-57; Column 5, lines 1-4 describe how electrode tabs are folded out such that the lid will be placed on the chamber while allowing current to be applied to the cassette), and the bottom wall has several planar sections, which can each be described as "flat". (Figure 3)

Tocci does not explicitly disclose a unit comprising apertures for sample loading or wells disposed below the apertures. Specific to claim 101, Tocci also does not disclose the instant comb.

Elson et al disclose a gel cassette (Figure 1) wherein samples are applied into wells formed in the gel through apertures (21) provided in the cover of the gel cassette. (Abstract; Column 2, lines 25-36) The templates taught by Elson et al are positioned in

a carrier, 24, and the assembly thus inserted into the cassette reads on the comb of claim 101. (Figure 1; Column 3, lines 5-14)

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the unit of Tocci by providing a row of apertures in the cover for sample loading, as taught by Elson et al, because Elson et al teaches the advantages of this design, in that it allows for a range of sample volumes and allows samples to be applied without opening the instrument. (Column 1, lines 36-38; Column 4, lines 5-14) In using the apertures taught by Elson et al, it would of course have been obvious to use the template carrier (24) and templates (20) taught by Elson et al, which are positioned in the gel matrix via the apertures, upon gelation. (Column 2, lines 27-36; Column 3, lines 5-14)

11. Claims 5, 6, 63, 64, 75, and 88 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tocci and Elson et al as applied to claims 1-4, 62, 71, 85-87, 91, and 94-101 above, and further in view of Pace.

Tocci and Elson et al disclose an electrophoresis unit as described above in addressing claims 1-4, 62, 71, 85-87, 91, and 94-101.

Neither Tocci nor Elson et al explicitly require any specific metal for the electrodes, although Tocci suggests nichrome or platinum. (Column 3, lines 46-47)

Pace discloses an electrophoretic device with copper or silver electrodes. (Column 7, lines 36-39)

It would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the device of Tocci by using copper electrodes, as taught by Pace, because it would reduce the cost of manufacture compared to the more standard platinum or gold electrodes for a disposable electrophoresis unit.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the device of Tocci by using silver electrodes, as taught by Pace, because it would reduce the cost of manufacture compared to the more standard platinum or gold electrodes for a disposable electrophoresis unit, while still being less reactive than most metal alternatives. (e.g. Cu)

Furthermore, given that Tocci does not specifically require any metal, but only suggests nichrome or platinum, it would have been a matter of choice to a skilled artisan to select an appropriate electrode material from those known in the art of electrophoresis, such as copper or silver.

Specific to claims 75 and 88, if copper or silver is used for the anode, metal ions will preferentially form rather than water hydrolysis products and will be present in the gel matrix, meeting the limitations of these claims. This is a property of these metals that is recognized by applicant. (Specification; Page 10, lines 7-13)

12. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tocci and Elson et al as applied to claims 1-4, 62, 71, 85-87, 91, and 94-101 above, and further in view of Eibl et al.

Tocci and Elson et al disclose an electrophoresis unit as described above in addressing claims 1-4, 62, 71, 85-87, 91, and 94-101.

Neither Tocci nor Elson et al explicitly require any specific metal for the electrodes, although Tocci suggests nichrome or platinum. (Column 3, lines 46-47)

Eibl et al disclose an electrophoretic device with aluminum electrodes. (Column 3, lines 30-37)

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Tocci by using aluminum electrodes, as taught by Eibl et al, because it would reduce the cost of manufacture compared to the more standard platinum or gold electrodes for a disposable electrophoresis unit.

Furthermore, given that Tocci does not specifically require any metal, but only suggests nichrome or platinum, it would have been a matter of choice to a skilled artisan to select an appropriate electrode material from those known in the art of electrophoresis, such as aluminum.

Further addressing claims 7 and 9, although Eibl does not specifically address the oxygen-absorbing abilities of aluminum, this is an innate property of the metal and would allow the gel to remain substantially oxygen-free, even if water electrolysis did occur.

13. Claims 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tocci and Elson et al as applied to claims 1-4, 62, 71, 85-87, 91, and 94-101 above, and further in view of Flesher et al.

Tocci and Elson et al disclose an electrophoresis unit as described above in addressing claims 1-4, 62, 71, 85-87, 91, and 94-101.

Neither Tocci nor Elson et al explicitly require any specific metal for the electrodes.

Flesher et al disclose an electrophoretic device with palladium electrodes. (Column 5, lines 29-34)

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Tocci by using palladium electrodes, as taught by Flesher et al, because they are highly resistive to corrosion.

Furthermore, given that Tocci did not specifically require any metal, it would be a matter of choice to a skilled artisan to select an appropriate electrode material from those known in the art of electrophoresis, such as palladium.

Further addressing claims 19 and 21, although Flesher et al do not specifically address the hydrogen-absorbing abilities of palladium, this is an innate property of the metal and would allow the gel to remain substantially hydrogen-free, even if water electrolysis did occur.

14. Claims 12-14 and 67-69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tocci and Elson et al as applied to claims 1-4, 62, 71, 85-87, 91, and 94-101 above, and further in view of Day.

Tocci and Elson et al disclose a combined electrophoresis unit as described above in addressing claims 1-4, 62, 71, 85-87, 91, and 94-101 above.

Specific to claim 13, Elson et al also disclose these sites being disposed in a row. (Figure 1)

Neither Tocci nor Elson et al explicitly disclose spacing the apertures to conform with intervals between tips on a loader (Claims 12, 24, and 41), or apertures arranged in a stagger format. (Claims 14, 26, and 43)

Day discloses an electrophoresis gel with sample wells spaced to match the spacing of standard multichannel pipettes. (Page 5, line 24 - Page 6, line 23) He also discloses staggered arrangement of wells. (e.g. Figure 4)

It would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the combination of Tocci and Elson et al by spacing the sample application slots taught by Elson to match the 9 mm spacing of multichannel pipettes, as taught by Day, because Day teaches the economy of time and labor in sample loading that such an arrangement allows. (Page 5, line 30 - Page 6, line 4)

It would also have been obvious to one having ordinary skill in that art to provide multiple, staggered rows of sample wells, as taught by Day, because Day teaches that

this arrangement allows a much more efficient use of the gel space in that many more samples can be run in a single gel. (Page 5, line 10 - Page 6, line 4)

15. Claims 53, 56, 65, 79-82, 89, 90, 93, 103, and 104 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tocci as applied to claims 1-4, 62, 71, 85-87, 91, and 94-101 above, and further in view of Monthony et al.

Tocci and Elson et al disclose a combined electrophoresis unit as described above in addressing claims 1-4, 62, 71, 85-87, 91, and 94-101 above.

Neither Tocci nor Elson et al explicitly disclose any particular buffer solution.

Monthony et al disclose electrophoresis methods, one of which involves using a Tris/Glycine buffer for separations at pH 8.9. (Table in Column 4, Example 1)

It would also have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the system of Tocci by using the buffer system disclosed by Monthony et al, because Tocci left this choice up to the skilled artisan using his invention, and one having ordinary skill would be able to select an appropriate buffer for a given separation from those known in the prior art. In addition, Monthony teach that electrophoresis of human serum on a gel using this buffer resulted in "sharply separated bands" (Column 6, lines 33-35), which would clearly have been desirable to a skilled artisan.

Applicant did not invent Tris/Glycine and the other buffers claimed here. A property not seen in the prior art of record is claimed here, but the discovery of a new property of a known material does not necessarily patentably distinguish the claim. See

Atlas Powder Co. v. Ireco Inc., 190 F.3d 1342, 1347, 51 USPQ2d 1943, 1947 (Fed. Cir. 1999) and *In re Best*, 562 F.2d 1252, 1254, 195 USPQ 430, 433 (CCPA 1977). There are no structural distinctions between the claimed invention and the prior art as combined above.

Specific to claims 79, 81, 89, and 93, since Applicant teaches that the Tris/Glycine buffer is a composition that meets the limitations of these claims (Note claim 80, for example), this combination meets all positively recited limitations of these claims.

16. Claims 54 and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tocci, Elson et al, and Monthony et al as applied to claims 53, 56, 65, 79-82, 89, 90, 93, 103, and 104 above, and further in view of Pace.

Tocci, Elson et al, and Monthony et al disclose a cassette as described above in addressing claims 53, 56, 65, 79-82, 89, 90, 92, and 93.

None among Tocci, Elson et al, or Monthony et al explicitly require any specific metal for the electrodes, although Tocci suggests nichrome or platinum. (Column 3, lines 46-47)

Pace discloses an electrophoretic device with copper or silver electrodes. (Column 7, lines 36-39)

It would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the device of Tocci by using copper electrodes, as

taught by Pace, because it would reduce the cost of manufacture compared to the more standard platinum or gold electrodes for a disposable electrophoresis unit.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the device of Tocci by using silver electrodes, as taught by Pace, because it would reduce the cost of manufacture compared to the more standard platinum or gold electrodes for a disposable electrophoresis unit, while still being less reactive than most metal alternatives. (e.g. Cu)

Furthermore, given that Tocci does not specifically require any metal, but only suggests nichrome or platinum, it would have been a matter of choice to a skilled artisan to select an appropriate electrode material from those known in the art of electrophoresis, such as copper or silver.

Specific to claims 75 and 88, if copper or silver is used for the anode, metal ions will preferentially form rather than water hydrolysis products and will be present in the gel matrix, meeting the limitations of these claims. This is a property of these metals that is recognized by applicant. (Specification; Page 10, lines 7-13)

17. Claim 50 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tocci, Elson et al, and Monthony et al as applied to claims 53, 56, 65, 79-82, 89, 90, 93, 103, and 104 above, and further in view of Eibl et al.

Tocci, Elson et al, and Monthony et al disclose a cassette as described above in addressing claims 53, 56, 65, 79-82, 89, 90, 93, 103, and 104.

None among Tocci, Elson et al, or Monthony et al explicitly require any specific metal for the electrodes, although Tocci suggests nichrome or platinum. (Column 3, lines 46-47)

Eibl et al disclose an electrophoretic device with aluminum electrodes. (Column 3, lines 30-37)

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Tocci by using aluminum electrodes, as taught by Eibl et al, because it would reduce the cost of manufacture compared to the more standard platinum or gold electrodes for a disposable electrophoresis unit.

Furthermore, given that Tocci does not specifically require any metal, but only suggests nichrome or platinum, it would have been a matter of choice to a skilled artisan to select an appropriate electrode material from those known in the art of electrophoresis, such as aluminum.

Further addressing claims 7 and 9, although Eibl does not specifically address the oxygen-absorbing abilities of aluminum, this is an innate property of the metal and would allow the gel to remain substantially oxygen-free, even if water electrolysis did occur.

18. Claims 58-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tocci, Elson et al, and Monthony et al as applied to claims 53, 56, 65, 79-82, 89, 90, 93, 103, and 104 above, and further in view of Day et al.

Tocci, Elson et al, and Monthony et al disclose a cassette as described above in addressing claims 53, 56, 65, 79-82, 89, 90, 93, 103, and 104.

Specific to claim 13, Elson et al also disclose these sites being disposed in a row. (Figure 1)

None among Tocci, Elson et al, or Monthony et al explicitly disclose spacing the apertures to conform with intervals between tips on a loader, or apertures arranged in a stagger format.

Day discloses an electrophoresis gel with sample wells spaced to match the spacing of standard multichannel pipettes. (Page 5, line 24 - Page 6, line 23) He also discloses staggered arrangement of wells. (e.g. Figure 4)

It would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the combination of Tocci and Elson et al by spacing the sample application slots taught by Elson to match the 9 mm spacing of multichannel pipettes, as taught by Day, because Day teaches the economy of time and labor in sample loading that such an arrangement allows. (Page 5, line 30 - Page 6, line 4)

It would also have been obvious to one having ordinary skill in that art to provide multiple, staggered rows of sample wells, as taught by Day, because Day teaches that this arrangement allows a much more efficient use of the gel space in that many more samples can be run in a single gel. (Page 5, line 10 - Page 6, line 4)

Allowable Subject Matter

19. Claim 77 is allowed.

20. Claims 18 and 73 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

21. Applicant's arguments filed 30 October 2007 have been fully considered but they are not persuasive.

Section II of the response states that claims 85 and 86 are amended, and in section III, Applicant states that claim 85 was amended in response to the rejection under 35 U.S.C. §112, second paragraph. No amendment to claims 85 and 86 was present in the submitted listing of claims, therefore the rejection is maintained. Note that claim 86 also requires amendment to overcome the rejection.

Applicant's argument that there is no reason to use a top wall with apertures in the system of Tocci, because the device requires that the top be removed for insertion of support medium is not persuasive, because this presumes that any user will wish to place samples on the separation medium at the same time as placement of the medium within the cassette. This is not necessarily the case, in contrast to Applicant's unsupported assertions. The convenience of being able to apply samples without

opening the entire cassette would have been clear to a skilled artisan, and would have motivated the modification, as presented in the rejection above.

Applicant's further arguments concerning the release of gas bear no relationship whatsoever to the invention as recited in the claims, and are therefore not persuasive. A skilled artisan would have had every expectation of success for the combination as provided for in the rejection.

Applicant further asserts that the references teach away from the combination in that Tocci shows a solid top wall, while Elson et al shows no device that requires a lid opening. This does not constitute teaching away from the modification. Teaching one way of performing a function does not in and of itself teach away from any other way of accomplishing this function. Small holes in the top lid would not have been expected by a skilled artisan to destroy the function of the lid in preventing substantial evaporation. No portion of either reference precludes the modification as presented in the rejection. The Examiner maintains that the convenience of having the ability to apply samples without the need of reopening the cassette of Tocci provides ample motivation for the modification to Tocci provided for in the rejection.

Applicants arguments concerning long-felt need are accompanied by no evidence pertaining to how the particular invention claimed relates to or meets any purported long-felt need, and they are therefore not persuasive.

Applicant's arguments concerning commercial success fail to show any nexus between purported commercial success and the limitations of the instant claims. In fact,

the mere submission of websites showing that products are marketed does not demonstrate that commercial success has in fact been achieved.

Regarding claim 87 and 91, Applicant further argues that the electrodes of Tocci are not embedded in the electrophoresis matrix. The Examiner responds that the semisolid buffer of Tocci, through which the current that drives electrophoresis passes, corresponds to a portion of the instant electrophoresis gel matrix in which the electrodes are embedded.

Regarding claims 99 and 100, Applicant argues that the bottom wall of Tocci is not flat. The Examiner responds that the central portion of the bottom wall of Tocci et al is clearly flat (Figure 3), which meets the limitations of the claim. The claim language does not explicitly exclude the reservoirs at either end of this region, as the central portion itself reads on the bottom wall as claimed.

Regarding the various rejections in further view of Pace, Eibl et al, Flesher et al, Day, and Monthony et al, Applicant's arguments concern limitations that these references are not relied upon to provide. The rejections are therefore maintained.

Conclusion

22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Jeffrey T. Barton whose telephone number is (571) 272-1307. The examiner can normally be reached on M-F 9:00AM - 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen can be reached on (571) 272-1342. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JTB
4 January 2008

NAM NGUYEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700